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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/822,231	04/02/2001	Kiyoaki Fujikura	010272	6692

38834 7590 01/30/2006

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EXAMINER

PARK, CHAN S

ART UNIT	PAPER NUMBER
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2622

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/822,231	Applicant(s) FUJIKURA, KIYOAKI	
	Examiner CHAN S. PARK	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                        |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____   |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/2/05 has been entered.

### ***Response to Amendment***

2. Applicant's amendment was received on 11/2/05, and has been entered and made of record. Currently, **claims 1-14** are pending.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The invention is directed to prevent the mechanical controller from detecting no printing medium error when there is no printing medium in the printing engine. The current claim wording is extremely confusing as to exactly where the created printing data is printed when there is no printing medium present in the printing engine. The claims seem to indicate that there is no printing medium present in the printing engine from the beginning. Examiner believes that printing the print data when there is no printing medium is impossible. It is respectfully suggested to specifically recite the limitation in the claims where the created print data will be printed according to the claimed apparatus/method.

Further, the term "the calculated total physical length of the logical-pages" is unclear and confusing. Referring to fig. 10A, for example, is the term referring to the total physical length of all four pages or only the last two pages? If a print job contains 100 5.5-inch logical-pages, does the apparatus calculate the total physical length to be 55 inches? If so, how does this calculation prevent the no printing medium error detection? Explanation/clarification is respectfully requested.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the characteristics/conditions of the print data. Referring to fig. 11A, for example (Examiner is using this figure to illustrate the argument), Examiner believes that a fourth page having a logical page length of 5.5 inch or less can be printed according to the invention specified in the Specification. In other words, the condition of the page length being 5.5 inch or less, in the case of fig. 11A, must be met in order to process the print data properly. However, if the length of the page is longer than 5.5 inch, the process simply cannot be performed. What if the fourth page is 7 inch long? Would it still prevent the detection? Doesn't the system first have to check whether the fourth page can be added with the third page first to achieve the prevention? Without the condition, the system simply cannot prevent the mechanical controller from detecting no printing medium error since the combined length will be longer than the physical length of one page. Therefore, Examiner believes the condition which specifies the length of the fourth page to prevent the no paper error detection must be claimed to point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps as presented in the argument above.

Claim 7 recites the limitation "the detection operation" in line 9. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-12 are rejected under 35 U.S.C. 102(a) as being anticipated by the applicant's admitted prior art disclosed in the Background of the Invention (hereinafter Prior Art).

5. With respect to claim 1, Prior Art discloses a printer apparatus (fig. 8), which is specified by the host to print in logical-page units, the printer comprising:

a mechanical controller that receives a printing command, controls a printing engine that prints on a printing medium, and detects when there is on printing medium in the printing engine (fig. 11A); and

a printer controller that receives a printing instruction from the host to print in logical-page units, creates printing data and sends the printing data to the mechanical controller (page 1, lines 20-27);

wherein the printer controller calculates the total physical length of the logical pages after creating the printing data and prevents the mechanical controller from detecting no printing medium error according to the calculated total physical length of the logical-pages and a physical length of one page of the printing medium.

It is noted that when the fourth page having the length of 5.5 inch cannot be printed according to the steps shown in fig. 11A, the fourth page can be printed according to the steps shown in fig. 10A. Hence, the detection of no printing medium is apparently prevented.

6. With respect to claim 2, Prior art discloses the printer apparatus of claim 1, wherein the printer controller creates bitmap data for each logical page as the printing data according to the printing instruction from the host for printing in logical-page units (page 1, lines 20-27) until the total physical length of plurality of the logical pages reaches the physical length of one page of the printing medium, and then sends the print command and the bitmap data in logical-page units to the mechanical controller in the logical-page units (page 2, lines 1-20).

7. With respect to claim 3, Prior Art discloses the printer apparatus of claim 1, wherein the printer controller receives logical-page lengths from the host, and calculates the total physical length of the logical-pages (page 2, lines 1-20).

8. With respect to claim 4, Prior Art discloses the printer apparatus of claim 1, wherein the printer controller calculates a physical length of the total logical pages, according to logical-page lengths and number of logical pages received from the host (page 2, lines 1-20).

9. With respect to claim 5, Prior Art discloses the printer apparatus of claim 1, wherein the printer engine comprises an engine for printing on continuous printing medium, having a set fold length, as the printing medium (page 2, lines 1-10).

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10. With respect to claim 6, Prior Art discloses the printer apparatus of claim 1, wherein the printer controller checks a physical length in the logical-page units (page 2, lines 1-20).

11. With respect to claim 7, arguments analogous to those presented for claim 1, are applicable.

12. With respect to claim 8, arguments analogous to those presented for claim 2, are applicable.

13. With respect to claim 9, arguments analogous to those presented for claim 3, are applicable.

14. With respect to claim 10, arguments analogous to those presented for claim 4, are applicable.

15. With respect to claim 11, arguments analogous to those presented for claim 5, are applicable.

16. With respect to claim 12, arguments analogous to those presented for claim 6, are applicable.



***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prior Art.

17. With respect to claim 13, referring to fig. 10A, when the printer controller detects that the calculated total physical length of the logical pages (total length of 3<sup>rd</sup> and 4<sup>th</sup> pages) matches the physical length of one page of the printing medium, it would have been obvious to one of ordinary skill in the art to clear out the no printing error flag to perform the printing since the fourth page can be printed before the error occurs according to fig. 10A. Therefore, it would have been obvious to obtain the invention as specified in claim 13.

18. With respect to claim 14, arguments analogous to those presented for claim 13, are applicable.

***Conclusion***

19. In response to this Office Action, Examiner respectfully requests the applicant to explain why the fourth page will be not printed according to fig. 11A (and why the method shown in fig. 10 cannot be used to print the fourth page) and to provide specific steps as to how the fourth page is printed according to the current invention. Explaining

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the invention using the specific examples, such as figs. 10 & 11, will greatly help the Examiner to better take a decision on the patentability.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAN S. PARK whose telephone number is (571) 272-7409. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

csp  
January 19, 2006

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